



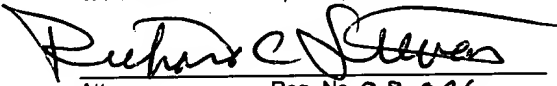
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of

Applicant : Foroozan Ghassemi  
Serial No. : 09/508,136  
Filed : 06/05/2000  
Title : ELECTRICAL POWER MEASUREMENT  
Docket : KEL 001 PA  
Art Unit : 2858

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria VA 22313-1450 on April 14, 2004.

  
Attorney Reg. No. 28,046

Commissioner for Patents  
PO Box 1450  
Alexandria VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.56, 1.97, AND 1.98

Applicant(s) submit(s) herewith patents, publications, and other information of which he/they are aware, which he/they believe(s) may be material, as defined in 37 CFR § 1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 CFR § 1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 CFR § 1.97(h), constitute an admission that any patent, publication, or other information referred to is, or is considered to be, material to the patentability of this invention. Further, pursuant to 37 CFR § 1.97(g), the filing of this Statement should not be construed as a statement that a search has been made or that no other material information exists.

04/20/2004 SDENBOB1 00000134 09508136  
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Docket No. KEL 001 PA

A listing of all items of information cited is attached on PTO Form PTO/SB/08, substitute form for 1449 /PTO. Copies of the items are enclosed for the convenience of the Examiner. The reference entitled "The Measurement of Apparent and Reactive Power with Unbalanced Loads and Non-Sinusoidal Waveforms" is a reference to a presentation given at a conference. There are no documents available for us to provide.

This Information Disclosure Statement is being filed within the period set forth in 37 CFR § 1.97(b) because it is believed to be filed before the mailing date of a final action under §1.113, a notice of allowance under §1.311, or an action that otherwise closes prosecution, and is accompanied by the fee of \$180 as set forth in §1.17(p).

Respectfully submitted,

STEVENS & SHOWALTER, L.L.P.

A handwritten signature in black ink, appearing to read "Richard C. Stevens", written over a horizontal line.

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Substitute for form 1449/PTO

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Sheet	1	of	3
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**Complete if Known**

Application Number	09/508,136
Filing Date	06/05/2000
First Named Inventor	Foroozan Ghassemi
Art Unit	2858
Examiner Name	Deb, Anjan K
Attorney Docket Number	KEL 001 PA

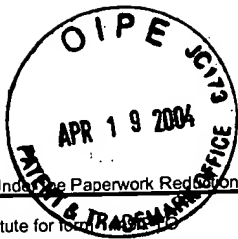
## U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
		EP 0 660 120 A	06/28/1995	Electrex		

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	09/508,136
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Art Unit	2858
Examiner Name	Deb, Anjan K
Attorney Docket Number	KEL 001 PA

Sheet 2 of 3

**NON PATENT LITERATURE DOCUMENTS**

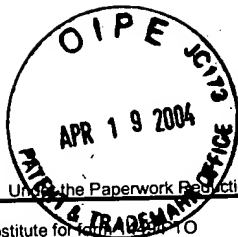
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		L.S. CZARNECKI, "Orthogonal Decomposition of the Currents in a 3-phase Non-Linear Asymmetrical Circuit with Non-sinusoidal Voltage Source," IEEE Trans. Instrumentation and Measurement Vol. 37, March 1987, pp. 30-34.	
		L.S. CZARNECKI, "What is wrong with the Budeanu Concept of Reactive and Distortion Power and why it should be Abandoned," IEEE Trans. Instrumentation and Measurement Vol. IM-36, Sept. 1987, pp. 834-837.	
		P.S. FILIPSKI, "Polyphase Apparent Power and Power Factor Under Distorted Waveform Conditions," IEEE Trans. on Power Delivery, Vol. 5, PWDR-6, No. 3, pp. 1161-1165, July, 1991.	
		L.S. CZARNECKI, "Power Related Phenomena in Three-Phase Unbalanced Systems," IEEE Trans. on Power Delivery, Vol. 10, No. 3, pp. 1168-1176, July 1995.	
		A. EMANUEL, "On the Definition of Power Factor and Apparent Power in Unbalanced Polyphase Circuits with Sinusoidal Voltage and Currents," IEEE Trans. on Power Delivery, Vol. 8, No. 3, pp. 841-852, July 1993.	
		IEEE WORKING GROUP REPORT, "Practical Definitions for Powers in Systems with Non-Sinusoidal Waveforms and Unbalanced Loads: A Discussion," IEEE Trans. on Power Delivery, Vol. 11, No. 1, pp. 79-101, Jan. 1996.	
		P.S. FILIPSKI, "Apparent Power - A Misleading Quantity in the Non-Sinusoidal Power Theory: Are all Non-Sinusoidal Power Theories Doomed to Fail?," ETEP. Vol. 3, No. 1, pp. 21-26, Jan/Feb 1993.	
		A.E. EMANUEL, "Powers in Non-Sinusoidal Situations. A Review of Definitions and Physical Meaning," IEEE Trans. on Power Delivery, Vol. 5, No. 3, pp. 1377-1389, July 1990.	
		R. WEST, "The Measurement of Apparent and Reactive Power with Unbalanced Loads and Non-Sinusoidal Waveforms," Distrubtion 2000 Conference, Sydney, 1997.	
		SALVATORE L ET AL, "Time-frequency Representations of Instantaneous Complex Power, Voltage and Current Space Vectors," European Transactions on Electrical Power Engineering, Vol. 4, No. 5, pp. 395-401, September, 1994.	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		Examiner Name	Deb, Anjan K
Sheet 3	of 3	Attorney Docket Number	KEL 001 PA

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		L.S. CZARNECKI ET AL, "Powers in Nonsinusoidal Networks: Their Interpretation, Analysis, and Measurement", IEEE Transactions on Instrumentation and Measurement, Vol. 39, No. 2, pp. 340-345, April, 1990.	

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